



#6

SEQUENCE LISTING

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<120> METHODS AND COMPOSITIONS FOR STIMULATING AXON
REGENERATION AND PREVENTING NEURONAL CELL DEGENERATION

<130> ERM-105.01

<140> 10/072,830

<141> 2002-02-08

<150> 60/267,832

<151> 2001-02-09

<150> 60/272,617

<151> 2001-03-01

<150> 60/289,990

<151> 2001-05-10

<160> 8

<170> PatentIn Ver. 2.1

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<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (32)..(748)

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Gly Tyr Asp Asn Arg Glu Ile Val Met Lys Tyr Ile His Tyr Lys Leu
10 15 20

tcg cag agg ggc tac gag tgg gat gcg gga gat gtg ggc gcc gcg ccc 148
Ser Gln Arg Gly Tyr Glu Trp Asp Ala Gly Asp Val Gly Ala Ala Pro
25 30 35

ccg ggg gcc gcc ccc gcg ccg ggc atc ttc tcc tcg cag ccc ggg cac 196
Pro Gly Ala Ala Pro Ala Pro Gly Ile Phe Ser Ser Gln Pro Gly His
40 45 50 55

acg ccc cat aca gcc gca tcc cgg gac ccg gtc gcc agg acc tcg ccg 244
Thr Pro His Thr Ala Ala Ser Arg Asp Pro Val Ala Arg Thr Ser Pro
60 65 70

ctg cag acc ccg gct gcc ccc ggc gcc gcc gcg ggg cct gcg ctc agc 292
 Leu Gln Thr Pro Ala Ala Pro Gly Ala Ala Ala Gly Pro Ala Leu Ser
 75 80 85

ccg gtg cca cct gtg gtc cac ctg acc ctc cgc cag gcc ggc gac gac 340
 Pro Val Pro Pro Val Val His Leu Thr Leu Arg Gln Ala Gly Asp Asp
 90 95 100

ttc tcc cgc cgc tac cgc cgc gac ttc gcc gag atg tcc agg cag ctg 388
 Phe Ser Arg Arg Tyr Arg Arg Asp Phe Ala Glu Met Ser Arg Gln Leu
 105 110 115

cac ctg acg ccc ttc acc gcg cgg gga cgc ttt gcc acg gtg gtg gag 436
 His Leu Thr Pro Phe Thr Ala Arg Gly Arg Phe Ala Thr Val Val Glu
 120 125 130 135

gag ctc ttc agg gac ggg gtg aac tgg ggg agg att gtg gcc ttc ttt 484
 Glu Leu Phe Arg Asp Gly Val Asn Trp Gly Arg Ile Val Ala Phe Phe
 140 145 150

gag ttc ggt ggg gtc atg tgt gtg gag agc gtc aac cgg gag atg tcg 532
 Glu Phe Gly Gly Val Met Cys Val Glu Ser Val Asn Arg Glu Met Ser
 155 160 165

ccc ctg gtg gac aac atc gcc ctg tgg atg act gag tac ctg aac cgg 580
 Pro Leu Val Asp Asn Ile Ala Leu Trp Met Thr Glu Tyr Leu Asn Arg
 170 175 180

cac ctg cac acc tgg atc cag gat aac gga ggc tgg gat gcc ttt gtg 628
 His Leu His Thr Trp Ile Gln Asp Asn Gly Gly Trp Asp Ala Phe Val
 185 190 195

gaa ctg tac ggc ccc agc atg cgg cct ctg ttt gat ttc tcc tgg ctg 676
 Glu Leu Tyr Gly Pro Ser Met Arg Pro Leu Phe Asp Phe Ser Trp Leu
 200 205 210 215

tct ctg aag act ctg ctc agt ttg gcc ctg gtg gga gct tgc atc acc 724
 Ser Leu Lys Thr Leu Leu Ser Leu Ala Leu Val Gly Ala Cys Ile Thr
 220 225 230

ctg ggt gcc tat ctg ggc cac aag tgaagtcaac atgcctgccc caaacaata 778
 Leu Gly Ala Tyr Leu Gly His Lys
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tgcaaaaggt tcactaaagc agtagaaata atatgcattg tcagtgatgt tccatgaaac 838

aaagctgcag gctgtttaag aaaaaataac acacatataa acatcacaca cacagacaga 898

cacacacaca cacaacaatt aacagtcttc aggcaaaacg tcgaatcagc tatttactgc 958

caaagggaaa tatcatttat tttttacatt attaagaaaa aaagatttat ttatttaaga 1018

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 <213> Homo sapiens

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Gly	Asp	Val	Gly	Ala	Ala	Pro	Pro	Gly	Ala	Ala	Pro	Ala	Pro	Gly	Ile
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Phe	Ser	Ser	Gln	Pro	Gly	His	Thr	Pro	His	Thr	Ala	Ala	Ser	Arg	Asp
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Pro	Val	Ala	Arg	Thr	Ser	Pro	Leu	Gln	Thr	Pro	Ala	Ala	Pro	Gly	Ala
65					70					75					80
Ala	Ala	Gly	Pro	Ala	Leu	Ser	Pro	Val	Pro	Pro	Val	Val	His	Leu	Thr
				85					90					95	
Leu	Arg	Gln	Ala	Gly	Asp	Asp	Phe	Ser	Arg	Arg	Tyr	Arg	Arg	Asp	Phe
		100						105					110		
Ala	Glu	Met	Ser	Arg	Gln	Leu	His	Leu	Thr	Pro	Phe	Thr	Ala	Arg	Gly
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Arg	Phe	Ala	Thr	Val	Val	Glu	Glu	Leu	Phe	Arg	Asp	Gly	Val	Asn	Trp
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Gly	Arg	Ile	Val	Ala	Phe	Phe	Glu	Phe	Gly	Gly	Val	Met	Cys	Val	Glu
145					150					155					160
Ser	Val	Asn	Arg	Glu	Met	Ser	Pro	Leu	Val	Asp	Asn	Ile	Ala	Leu	Trp
				165					170					175	
Met	Thr	Glu	Tyr	Leu	Asn	Arg	His	Leu	His	Thr	Trp	Ile	Gln	Asp	Asn
			180					185					190		
Gly	Gly	Trp	Asp	Ala	Phe	Val	Glu	Leu	Tyr	Gly	Pro	Ser	Met	Arg	Pro
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Leu	Phe	Asp	Phe	Ser	Trp	Leu	Ser	Leu	Lys	Thr	Leu	Leu	Ser	Leu	Ala
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Leu	Val	Gly	Ala	Cys	Ile	Thr	Leu	Gly	Ala	Tyr	Leu	Gly	His	Lys	
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<220>

<221> CDS.

<222> (135)..(833)

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tccctattat aaaa atg tct cag agc aac cgg gag ctg gtg gtt gac ttt 170
Met Ser Gln Ser Asn Arg Glu Leu Val Val Asp Phe
1 5 10

ctc tcc tac aag ctt tcc cag aaa gga tac agc tgg agt cag ttt agt 218
Leu Ser Tyr Lys Leu Ser Gln Lys Gly Tyr Ser Trp Ser Gln Phe Ser
15 20 25

gat gtg gaa gag aac agg act gag gcc cca gaa ggg act gaa tcg gag 266
Asp Val Glu Glu Asn Arg Thr Glu Ala Pro Glu Gly Thr Glu Ser Glu
30 35 40

atg gag acc ccc agt gcc atc aat ggc aac cca tcc tgg cac ctg gca 314
Met Glu Thr Pro Ser Ala Ile Asn Gly Asn Pro Ser Trp His Leu Ala
45 50 55 60

gac agc ccc gcg gtg aat gga gcc act gcg cac agc agc agt ttg gat 362
Asp Ser Pro Ala Val Asn Gly Ala Thr Ala His Ser Ser Ser Leu Asp
65 70 75

gcc cgg gag gtg atc ccc atg gca gca gta aag caa gcg ctg agg gag 410
Ala Arg Glu Val Ile Pro Met Ala Ala Val Lys Gln Ala Leu Arg Glu
80 85 90

gca ggc gac gag ttt gaa ctg cgg tac cgg cgg gca ttc agt gac ctg 458
Ala Gly Asp Glu Phe Glu Leu Arg Tyr Arg Arg Ala Phe Ser Asp Leu
95 100 105

aca tcc cag ctc cac atc acc cca ggg aca gca tat cag agc ttt gaa 506
Thr Ser Gln Leu His Ile Thr Pro Gly Thr Ala Tyr Gln Ser Phe Glu
110 115 120

cag gta gtg aat gaa ctc ttc cgg gat ggg gta aac tgg ggt cgc att 554
Gln Val Val Asn Glu Leu Phe Arg Asp Gly Val Asn Trp Gly Arg Ile
125 130 135 140

gtg gcc ttt ttc tcc ttc ggc ggg gca ctg tgc gtg gaa agc gta gac 602
Val Ala Phe Phe Ser Phe Gly Gly Ala Leu Cys Val Glu Ser Val Asp
145 150 155

aag gag atg cag gta ttg gtg agt cgg atc gca gct tgg atg gcc act 650
Lys Glu Met Gln Val Leu Val Ser Arg Ile Ala Ala Trp Met Ala Thr
160 165 170

tac ctg aat gac cac cta gag cct tgg atc cag gag aac ggc ggc tgg 698
Tyr Leu Asn Asp His Leu Glu Pro Trp Ile Gln Glu Asn Gly Gly Trp
175 180 185

gat act ttt gtg gaa ctc tat ggg aac aat gca gca gcc gag agc cga 746
 Asp Thr Phe Val Glu Leu Tyr Gly Asn Asn Ala Ala Ala Glu Ser Arg
 190 195 200

aag ggc cag gaa cgc ttc aac cgc tgg ttc ctg acg ggc atg act gtg 794
 Lys Gly Gln Glu Arg Phe Asn Arg Trp Phe Leu Thr Gly Met Thr Val
 205 210 215 220

gcc ggc gtg gtt ctg ctg ggc tca ctc ttc agt cgg aaa tgaccagaca 843
 Ala Gly Val Val Leu Leu Gly Ser Leu Phe Ser Arg Lys
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Leu Ser Gln Lys Gly Tyr Ser Trp Ser Gln Phe Ser Asp Val Glu Glu
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Asn Arg Thr Glu Ala Pro Glu Gly Thr Glu Ser Glu Met Glu Thr Pro
 35 40 45

Ser Ala Ile Asn Gly Asn Pro Ser Trp His Leu Ala Asp Ser Pro Ala
 50 55 60

Val Asn Gly Ala Thr Ala His Ser Ser Ser Leu Asp Ala Arg Glu Val
 65 70 75 80

Ile Pro Met Ala Ala Val Lys Gln Ala Leu Arg Glu Ala Gly Asp Glu
 85 90 95

Phe Glu Leu Arg Tyr Arg Arg Ala Phe Ser Asp Leu Thr Ser Gln Leu
 100 105 110

His Ile Thr Pro Gly Thr Ala Tyr Gln Ser Phe Glu Gln Val Val Asn
 115 120 125

Glu Leu Phe Arg Asp Gly Val Asn Trp Gly Arg Ile Val Ala Phe Phe
 130 135 140

Ser Phe Gly Gly Ala Leu Cys Val Glu Ser Val Asp Lys Glu Met Gln
 145 150 155 160

Val Leu Val Ser Arg Ile Ala Ala Trp Met Ala Thr Tyr Leu Asn Asp
 165 170 175

His Leu Glu Pro Trp Ile Gln Glu Asn Gly Gly Trp Asp Thr Phe Val

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